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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,105	01/29/2004	Susumu Kurosawa	17389	4428

7590 03/31/2005
Paul J. Esatto, Jr.
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EXAMINER

THOMAS, ERIC W

ART UNIT PAPER NUMBER

2831

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/767,105	Applicant(s) KUROSAWA ET AL.	
	Examiner Eric W. Thomas	Art Unit 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 8-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/04</u> . | 6) <input type="checkbox"/> Other: _____ |

INTRODUCTION

The examiner acknowledges, as recommended in the MPEP, the applicant's submission of the amendment dated 3/14/05. At this point, claims 15-17 have been added, and claims 8-17 have been withdrawn from consideration. Thus claims 1-17 are pending in the instant application.

DETAILED ACTION

1. Claims 8-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species/invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3/14/05.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

3. Claims 1, 5-7 are objected to because of the following informalities:

Claim 1, line 10, insert —one or more—before “first”.

Claim 1, line 11, insert —one or more—before “second”.

Claim 5, line 2, the limitation, “including one first varactor element and one second varactor element” is confusing. Are these varactor elements the same as the ones already claimed in claim 1?

Claim 6, lines 2-3, the limitation, "two first varactor elements or two second varactor elements with the other being one" is confusing. Are these varactor elements the same as the ones already claimed in claim 1?

Claim 7, line 5, insert —one or more—before "first"

Claim 7, line 6, insert —one or more—after the third occurrence of "said"

Appropriate correction is required.

Allowable Subject Matter

4. Claims 1-7 would be allowable if rewritten to overcome the claim objections found on pages 2-3 of the instant action.

5. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or fairly suggest (taken in combination with the other claimed features) a voltage variable capacitance device wherein the thickness of said insulating film of the first varactor element is thinner than the thickness of the insulating film of the second varactor element, and the number of the first and second varactor elements is set in accordance with a desired correlation between a voltage applied between the first terminal and the second terminal and a capacitance between the well and said electrode (claims 1-7).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6,212,056 – discloses a micromachined variable capacitor.

2002/0074589 – discloses a semiconductor varactor with reduced parasitic resistance.

2003/0085449 – discloses a varactor circuit having an increased tuning range (varactors in series).

7. This application is in condition for allowance except for the following formal matters:

- 1) Cancel non-elected claims.
- 2) Check the specification of minor errors.
- 3) Amend the claims to overcome the claim objections found on pages 2-3 of the instant action.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

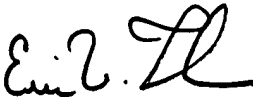
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric W. Thomas whose telephone number is 571-272-1985. The examiner can normally be reached on Monday - Friday 5:30 AM - 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2831

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ewt


ERIC W. THOMAS
PRIMARY EXAMINER

3/27/05